

Claims

1. A method of arranging a host apparatus to transmit commands to an external storage medium device connected to the host apparatus over an external databus
5 which is arranged in accordance with one of the IEEE 1394 standard or the Universal Serial Bus standard, the method comprising:
providing the host apparatus with a command bus and a command interface arranged in accordance with one of the ATA/IDE standard or the Serial ATA standard for transmitting commands to a storage medium device over the command
10 bus; and
providing the host apparatus with at least one integrated circuit chip connected to the command bus and to the external databus and having an interface arranged to convert commands received from the command bus in a format in accordance with said one of the ATA/IDE standard or the Serial ATA standard into a
15 format in accordance with said one of the IEEE 1394 standard or the Universal Serial Bus standard and to transmit the converted commands over the external databus.
2. A method according to claim 1, wherein the host apparatus is a digital television receiver apparatus.
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3. A method according to claim 1 or 2, wherein one of the ATA/IDE standard or the Serial ATA standard is the ATA/IDE standard.
4. A method according to any one of the preceding claims, wherein said one of
25 the IEEE 1394 standard and the Universal Serial Bus standard is the IEEE 1394 standard.
5. A method according to claim 4, wherein said one of the IEEE 1394 standard and the Universal Serial Bus standard is the IEEE 1394 standard including a Serial
30 Bus Protocol.

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6. A method according to any one of the preceding claims, wherein the interface of the integrated circuit chip comprises:

a first layer arranged in accordance with said storage medium device standard to receive commands from the command bus;

5 a second layer arranged to convert commands output from the first layer into a format in accordance with said one of the IEEE 1394 standard or the Universal Serial Bus standard; and

a third layer arranged in accordance with said one of the IEEE 1394 standard or the Universal Serial Bus standard to transmit the converted commands over the
10 external databus.

7. A host apparatus arranged to transmit commands to an external storage medium device connected to the host apparatus over an external databus which is arranged in accordance with one of the IEEE 1394 standard or the Universal Serial
15 Bus standard, the host apparatus comprising:

a command bus and a command interface arranged in accordance with one of the ATA/IDE standard or the Serial ATA standard for transmitting commands to a storage medium device over the storage medium command bus; and

at least one integrated circuit chip connected to the storage medium command
20 bus and having terminals for connection to the external databus, the integrated circuit chip having an interface arranged to convert commands received from the command bus in a format in accordance with one of the ATA/IDE standard or the Serial ATA standard into a format in accordance with said one of the IEEE 1394 standard or the Universal Serial Bus standard, and to supply the converted commands to the
25 terminals for connection to the external databus.

8. A host apparatus according to claim 7, wherein the host apparatus is a digital television receiver apparatus.

30 9. A host apparatus according to claim 7 or 8, wherein said one of the ATA/IDE

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standard or the Serial ATA standard is the ATA/IDE standard.

10. A host apparatus according to any one of claims 7 to 9, wherein said one of the IEEE 1394 standard and the Universal Serial Bus standard is the IEEE 1394
5 standard.

11. A host apparatus according to claim 10, wherein said one of the IEEE 1394 standard and the Universal Serial Bus standard is the IEEE 1394 standard including a Serial Bus Protocol.
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12. A host apparatus according to any one of claims 7 to 11, wherein the interface of the integrated circuit chip comprises:

a first layer arranged in accordance with said one of the ATA/IDE standard or the Serial ATA standard to receive commands from the command bus;

15 a second layer arranged to convert commands output from the first layer into a format in accordance with said one of the IEEE 1394 standard or the Universal Serial Bus standard; and

a third layer arranged in accordance with said one of the IEEE 1394 standard or the Universal Serial Bus standard to transmit the converted commands over the
20 external databus.

13. An integrated circuit chip having:
terminals for connection to a command bus in accordance with one of the ATA/IDE standard or the Serial ATA standard for transmitting commands to a
25 storage medium device over the storage medium command bus;
terminals for connection to an external databus in accordance with one of the IEEE 1394 standard or the Universal Serial Bus standard; and
an interface arranged to convert commands received at the terminals for connection to a storage medium command bus from a format in accordance with one
30 of the ATA/IDE standard or the Serial ATA standard into a format in accordance

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with said one of the IEEE 1394 standard or the Universal Serial Bus standard, and to supply the converted commands to the terminals for connection to the external databus.

5 14. An integrated circuit chip according to claim 13, wherein the host apparatus is a digital television receiver apparatus.

15. An integrated circuit chip according to claim 13 or 14, wherein one of the ATA/IDE standard or the Serial ATA standard is the ATA/IDE standard.

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16. An integrated circuit chip according to any one of claims 13 to 15, wherein said one of the IEEE 1394 standard and the Universal Serial Bus standard is the IEEE 1394 standard.

15 17. An integrated circuit chip according to claim 16, wherein said one of the IEEE 1394 standard and the Universal Serial Bus standard is the IEEE 1394 standard including a Serial Bus Protocol.

18. An integrated circuit chip according to any one of claims 13 to 17, wherein
20 the interface of the integrated circuit chip comprises:

a first layer arranged in accordance with one of the ATA/IDE standard or the Serial ATA standard to receive commands from the command bus;

a second layer arranged to convert commands output from the first layer into a format in accordance with said one of the IEEE 1394 standard or the Universal

25 Serial Bus standard; and

a third layer arranged in accordance with said one of the IEEE 1394 standard or the Universal Serial Bus standard to transmit the converted commands over the external databus.